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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/990,468

11/21/2001

Qi Bi

29250-000654/US/CPA

3187

30594

7590

07/11/2005

HARNESS, DICKEY & PIERCE, P.L.C.

P.O. BOX 8910

RESTON, VA 20195

EXAMINER

PHUNKULH, BOB A

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/990,468

Applicant(s)

BI ET AL.

Examiner

Bob A. Phunkulh

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This communication is in response to applicant's 02/03/2004 amendment(s)/response(s) in the application of **BI et al.** for "**METHODOLOG OF REDUCING AREAS WITH MULTIPLE DOMINANT PILOTS BY INSTULING SIMULCATING ELEMENT**" filed 02/12/1998. The amendments/response to the claims have been entered. Claim 3 has been canceled. Claims 36-37 have been added. Claims 1-2, 4-37 are now pending.

Claim Objections

Claim 37 is objected to because of the following informalities: in line 3, it appears that the claimed subject matter "the pilot signal transmitted by the transceiver element" should be changed to "the pilot signal transmitted by the base station--". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-2, 4-37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to

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which it pertains, or with which it is most nearly connected, to make and/or use the invention. In independent claims 1, the amended claimed subject matter "linking said transceiver element with only one of the plurality of nearby base stations" is not supported by the original specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-5, 8-12, 14-15, 17-18, 21-25, 28-32, 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver, Jr. et al. (US 6,108,364), hereinafter Weaver.

Regarding claims 1, 8-9, 12, 21-24, 28-29, 31, 36-37 Weaver discloses a method for reducing the effect of multiple dominant pilots in a CDMA communication system comprising the steps of:

linking a transceiver element with a nearby base station for transporting and amplifying signals between said transceiver element and said nearby base station (the repeater is link to a base station 115 and operable for transporting and amplifying signals between the repeater and the base station see col. 9 lines 16-31); and

transmitting from said transceiver element forward link signals of a nearby sector associated with said nearby base station (see col. 9 lines 16-31).

Weaver fails to explicitly disclose locating a fixed transceiver element in a high density area of multiple dominant pilots.

However, it would have been obvious to one having ordinary skill in the art at the time of invention was made to place the repeater of Weaver in high density of area of multiple dominant of pilots or at the area in which increased coverage is desired (see col. 9 lines 16-31). This claimed subject matter is an intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Regarding claims 4-5, 17-18, 34-35, Weaver is silent on linking the repeater and the base station by a wired connection or a wireless connection.

However, it would have been obvious to one having ordinary skill in the art at the time of invention was made to implement the linking between the repeater and base station of Weaver by wired connection or wireless connection for design choice –where wireless connection provides the flexibility of moving the repeater as desired and wired line connection provides the flexibility of increasing coverage where the wireless

connection can not reach i.e. the shadow of a large building or in a free way tunnel.

Regarding claims 10, 14, Weaver discloses the transceiver element is a simulcasting element (see col. 6 lines 1-10).

Regarding claims 11, 15, 25, 32, Weaver discloses the transceiver element is an omni-directional base station (see col. 6 lines 1-10).

Regarding claim 30, Weaver discloses the predetermined dB threshold level is within a range of 3 to 6dB of the local signal strength (see col. 5 lines 5-8).

Claims 2, 13, 16, 27, 33, are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver in view of Schroderus (US 5,983,072).

Regarding claims 2, 13, 16, 27, 33, Weaver fails to explicitly disclose receiving reverse link signals (mobile to base station or reverse link) at said transceiver element for said nearby sector associated with said nearby base station.

Schroderus, on the other hand, disclose receiving reverse link signals (mobile to base station or reverse link) at said transceiver element for said nearby sector associated with said nearby base station (see col. 2 lines 29-37 and figure 1).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to includes the teaching of Schroderus especially the repeater with ability to receives reverse link signals at the repeater and forwarding the

received signals to the base station for providing the repeater with operable both forwarding/relaying traffic between the mobile stations and the base station.

Claims 6-7, 19-20, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver in view of Kinnunen et al. (US 6,052,557), hereinafter Kinnunen.

Regarding claims 6-7, 19-20, 26, Weaver fails to disclosed that transmitting from the transceiver element with less power than transmitting from the nearby base station.

Kinnunen, on the other hand, teach that by relaying signals using a repeater in cellular communication system transmission power can be saved (**see col. 5 lines 24-40**).

Therefore, it would have been obvious to one having ordinary skilled in the art at the time of invention was made to transmit signals with less power from the repeater to it destinations than transmitting from the base station to the repeater for saving power and avoid interference potential among signals.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any response to this action should be mailed to:

The following address mail to be delivered by the United States Postal Service (USPS) only:

Mail Stop _____
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306, (for formal communications intended for entry)

Or:

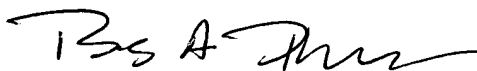
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220 20th Street South
Customer Window, Mail Stop _____
Crystal Plaza Two, Lobby, Room 1B03
Arlington, VA 22202.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(571) 272-3083**. The examiner can normally be reached on Monday-Tuesday from 8:00 A.M. to 5:00 P.M. (first week of the bi-week) and Monday-Friday (for second week of the bi-week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Chau Nguyen**, can be reach on **(571) 272-3126**. The fax phone number for this group is **(703) 872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bob A. Phunkulh
Primary Examiner
TC 2600
Art Unit 2661
July 08, 2005

BOB PHUNKULH
PRIMARY EXAMINER